CLAIMS

WHAT IS CLAIMED IS:

1. A method of erasing repeated patterns in a dark/light image obtained by image pickup of a subject of inspection, when identifying defects present in a repeated pattern in a subject of inspection, comprising the procedures of:

demarcating the obtained image into a plurality of areas;

detecting a reference pixel in one of said demarcated areas;

assigning a comparison pixel in each of the rest of said demarcated areas;

obtaining a plurality of density differences between said reference pixel and each of said comparison pixels;

determining a density difference that is closest to 0 as a specific density difference; and

applying said specific density difference to a reference density of the image.

2. The method of erasing repeated patterns in a dark/light image according to Claim 1, wherein the subject of inspection is a liquid crystal array panel.

3. The method of erasing repeated patterns in a dark/light image according to Claim 1, wherein the subject of inspection is a plasma display panel.

4. The method of erasing repeated patterns in a dark/light image according to Claim 1, wherein, in the step of demarcating the obtained image into a plurality of areas, the plurality of areas have a size of a predetermined number of pixels obtained in accordance with the pattern pitch of the repeated patterns in the dark/light image.

5. The method of erasing repeated patterns in a dark/light image according to Claim 1, wherein, in the step of determining a specific density difference, a mean value of the plurality of density differences between the reference pixel and the comparison pixels is determined as the specific density difference.

6. A method of manufacturing electronic equipment devices at least including liquid crystal panels, plasma display panels, and semiconductor wafers, including an inspection process that is performed in accordance with the method of erasing repeated patterns as set forth in claim 1.

7. A pattern defect inspection device comprising:

an image pickup element that picks up an image of a subject of inspection; and

a processing device that detects pattern defects by storing and processing dark/light image data obtained by image pickup of the inspection subject, wherein the processing device includes:

a unit for demarcating the obtained image into a plurality of areas,

detecting a reference pixel in one of said demarcated areas,

assigning a comparison pixel in each of the rest of said demarcated areas, and

obtaining a plurality of density differences between said reference pixel and each of said comparison pixels;

a unit for determining a density difference that is closest to 0 as a specific density difference; and

a unit for generating a pattern-erased image.

8. The pattern defect inspection device according to Claim 7, wherein the subject of inspection is a liquid crystal array panel.

9. The pattern defect inspection device according to Claim 7, wherein the subject of inspection is a plasma display panel.

10. The pattern defect inspection device according to Claim 7, wherein, instead of determining a density difference that is closed to 0 as a specific density difference, a mean value of the plurality of density differences between the reference pixel and the comparison pixels is determined as the specific density difference.